

METHOD AND APPARATUS FOR TUNING RF INTEGRATED LC FILTERS

ABSTRACT OF THE DISCLOSURE

5 Using low impedance switches and coupling to a
virtual ground, one or more capacitors are selectively
switched into or out of an inductive-capacitive resonant
circuit portion of an integrated circuit filter to alter
the resonant frequency based on a phase difference
10 between the resonant frequency and a reference frequency.
The capacitors are sized for a sequence of total
capacitances proceeding by halves or doubles between
values corresponding to minimum and maximum desired
frequency adjustments, allowing a binary count of pulses
15 representative of the phase difference to address the
correct combination of capacitors. An exact or ratioed
replica of the inductive-capacitive resonant circuit,
controlled by the same capacitance selection signal, may
be used as a frequency-selective amplifier load or
20 matching network, or to form a ladder filter.